Imanol Pérez Arribas

Personal Information

Name Imanol

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Education

2016-Now PhD in Mathematics at the University of Oxford.

2012–2016 Bachelor of Science in Mathematics at the University of the Basque Country in Spain.

Average grade: 9.61/10.

2014–Now Second year Physics student at Universidad Nacional de Educación a Distancia (UNED) – currently on hold.

Work experience

Jan 2018 – Quantitative Researcher at J.P. Morgan in London, with the objective of exploring Now potential applications of my PhD to projects at the firm.

Jul 2017–Sep Quantitative Research Associate internship at J.P. Morgan in London in the Equities 2017 Derivatives team.

Mar Research internship at the *Basque Center for Applied Mathematics* (BCAM), under 2016–Aug the project *Data Analytics for Financial Services*, whose main objective was the forecast of future behaviour of a certain commodity for a company of the energy sector.

Aug Co-founder of the startup Cooplo, a social network whose objective is to recommend 2014–Aug events to users based on their tastes and mood. I was in charge of the technical side of the startup, which involved both coding and building the algorithm using machine learning.

Jun Summer research internship at the *Basque Center for Applied Mathematics* (BCAM), 2015–Aug on Analysis and PDEs. 2015

Scholarships and awards

- 2017 Extraordinary Award for my Bachelor in Mathematics. Awarded by the University of the Basque Country.
- 2016 Full scholarship offered by the bank La Caixa for graduate studies in Europe.
- 2016 Scholarship from the University of Oxford that covers University and College Fees.

Programming languages

- Python
- o R
- o C++
- MATLAB
- Mathematica

Publications

2019 Nonparametric pricing and hedging of exotic derivatives.

Terry Lyons, Sina Nejad and Imanol Perez Arribas arXiv:1905.00711.

2019 **Deep Signatures**.

Patric Bonnier, Patrick Kidger, Imanol Perez Arribas, Cristopher Salvi and Terry Lyons arXiv:1809.09466.

2018 Optimal execution with rough path signatures.

Jasdeep Kalsi, Terry Lyons and Imanol Perez Arribas arXiv:1905.00728.

2018 Model-free pricing and hedging in discrete time using rough path signatures.

Terry Lyons, Sina Nejad and Imanol Perez Arribas arXiv:arXiv:1905.01720.

2018 Derivatives pricing using signature payoffs.

Imanol Perez Arribas arXiv:1809.09466.

2018 Labelling as an unsupervised learning problem.

Terry Lyons and Imanol Perez Arribas arXiv:1805.03911.

2018 A signature-based machine learning model for bipolar disorder and borderline personality disorder.

Imanol Perez Arribas, Guy M. Goodwin, John R. Geddes, Terry Lyons and Kate E.A. Saunders

Translational Psychiatry, 8(1), p.274.